

# SEQUENCE LISTING

<110> JAPAN SCIENCE AND TECHNOLOGY CORPORATION MANAGER OF NATIONAL INSTITUTE  
OF INFECTIOUS DISEASES  
Hanada, Kentaro  
Nishijima, Masahiro  
Kumagai, Keigo

<120> DRUG PROMOTING CERAMIDE TRANSPORT, BASE SEQUENCE FOR PRODUCING THE  
DRUG, METHOD OF MEASURING ACTIVITY OF PROMOTING CERAMIDE RELEASE AND METHOD  
OF MEASURING ACTIVITY OF PROMOTING INTERMEMBRANE CERAMIDE TRANSFER

<130> 283729US0X PCT

<160> 32

<170> PatentIn version 3.1

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<212> PRT

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Trp	Thr	Asn	Tyr	Ile	His	Gly	Trp	Gln	Asp	Arg	Trp	Val	Val	Leu	Lys
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Asn	Asn	Ala	Leu	Ser	Tyr	Tyr	Lys	Ser	Glu	Asp	Glu	Thr	Glu	Tyr	Gly
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Cys	Arg	Gly	Ser	Ile	Cys	Leu	Ser	Lys	Ala	Val	Ile	Thr	Pro	His	Asp
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Phe	Asp	Glu	Cys	Arg	Phe	Asp	Ile	Ser	Val	Asn	Asp	Ser	Val	Trp	Tyr
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Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu  
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Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val  
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Gln Lys Val Glu Glu Met Val Gln Asn His Met Thr Tyr Ser Leu Gln  
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Asp Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu

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 Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp  
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 Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg  
 115 120 125  
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 Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp  
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 Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro  
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 Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys  
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 Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp  
 225 230 235 240

Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu  
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Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser  
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Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu  
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Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile  
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Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val  
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Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val  
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Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala  
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Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg  
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Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His  
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Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Asn  
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Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile Tyr Gln Thr His Lys

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Asn Asn Thr Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly		
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Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp		
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Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg  
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Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser  
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Thr Leu Gln Lys Tyr Phe Asp Val Cys Ala Asp Ala Val Ser Lys Asp  
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Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro  
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Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp  
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Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu  
 245 250 255

Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Glu Ser  
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Trp Gln Lys Arg His Asp Lys Glu Met Glu Lys Arg Arg Arg Leu Glu  
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Glu Ala Tyr Lys Asn Ala Met Ala Glu Leu Lys Lys Lys Pro Arg Phe  
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Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile  
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Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val  
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Gln Lys Val Glu Glu Met Val Gln Asn His Met Thr Tyr Ser Leu Gln  
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Asp Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu  
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Cys Asn Tyr Phe Trp Ser Val Asp Val Arg Asn Asp Trp Glu Thr Thr  
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Ile Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val  
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Leu Tyr Leu Ser Ala Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp  
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Pro Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile  
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Cys Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg  
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Asp Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly  
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Gly Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr



565

570

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Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys  
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Asn Asn Thr Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly  
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Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp  
 65                  70                  75                  80

Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr  
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Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile  
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Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg  
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Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser  
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Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys  
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Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp  
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Thr Leu Gln Lys Tyr Phe Asp Val Cys Ala Asp Ala Val Ser Lys Asp  
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Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro  
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Thr Thr Arg Ser Asp Gly Asp Phe Leu His Asn Thr Asn Gly Asn Lys  
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Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp  
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Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu  
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Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Glu Ser  
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Trp Gln Lys Arg His Asp Lys Glu Met Glu Lys Arg Arg Arg Leu Glu  
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Glu Ala Tyr Lys Asn Ala Met Ala Glu Leu Lys Lys Lys Pro Arg Phe  
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Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu  
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Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile  
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Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Pro  
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Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val  
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Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val  
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Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met  
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Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala  
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Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg  
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Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His  
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Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Ser  
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 465 470 475 480

Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile Tyr Gln Thr His Lys  
 485 490 495

Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu Tyr Leu Ser Ala Ile  
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Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro Glu Thr Trp Ile Val  
 515 520 525

Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro Leu Asn Asn Arg Cys  
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Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys Gln Thr Leu Val Ser  
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Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp Asn Ile Leu Cys Lys  
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Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly Trp Ala Pro Ala Ser  
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